

Water-Data Report 2008

01467005 NORTH BRANCH RANCOCAS CREEK AT IRON WORKS PARK, AT MOUNT HOLLY, NJ

DELAWARE RIVER BASIN

LOCATION.--Lat 39°59'35", long 74°46'53" referenced to North American Datum of 1983, Mount Holly Township, Burlington County, NJ, Hydrologic Unit 02040202, on right bank at Mill Dam in Iron Works and Mill Dam Park, 0.3 mi north of Saint Andrews Cemetery in Mount Holly, and 1.2 mi east of Clermont.

DRAINAGE AREA .-- 140 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water years 1970, and 1998 to current year. Published as "at Pine Street" (station 01467006) 1998-99. Established as a continuous stage-only station September 2006.

GAGE.--Water stage recorder and crest stage gages. Downstream staff gage for QW sampling. Gage datum is NAVD of 1988.

REMARKS.--Satellite stage telemetry at station. Operation of gates in dam significantly affect water level during periods of high flow.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 14.23 ft, Apr 16, 2007.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 11.45 ft, Jan 18 at 1245.

DISCHARGE MEASUREMENTS WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Date	Discharge, in ft³/s
Nov 7, 2007	26.1
Mar 6, 2008	180
Jun 12, 2008	86.8
Aug 12, 2008	49.6

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1998 to current year. Published as "at Pine Street" (station 01467006) 1998-99.

REMARKS.--Site is at head of tide; all samples collected at low tide. Cooperative Network Site Descriptor: Watershed Integrator and Trace Element Assessment (303d) special study site, NJ Department of Environmental Protection Watershed Management Area 19. The samples on Jan 7, Mar 26, and Jun 25 were for the Trace Element Assessment (303d).

COOPERATION.--Physical measurements and samples for laboratory analysis on Jan 7, Mar 26, and Jun 25 were provided by the NJ Department of Environmental Protection. Determinations of dissolved ammonia, dissolved orthophosphate, and suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

WATER-QUALITY DATA WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 1 of 4 [Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Time	Instan- taneous dis- charge, ft3/s (00061)	Turbdty white light, det ang 90+/-30 corrctd NTRU (63676)	UV absorb- ance, 254 nm, wat flt units /cm (50624)	UV absorb- ance, 280 nm, wat flt units /cm (61726)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specific onductance, wat unf µS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)
Nov													
07	0900	26	5.3	.241	.193	761	12.9	112	7.2	187	7.5	9.3	28
Jan													
07	1000		4.2			768	12.5	97	6.3	138	8.4	3.7	
Mar													
06	1100	180	9.8	.252	.194	765	11.2	96	6.2	141	11.0	8.7	24
26	0900		5.3			764	10.5	88	5.5	111	9.6	7.8	
Jun													
12	0920	87	11	.534	.426	760	7.0	83	6.3	101	25.5	24.3	19
25	1030		9.0			769	6.9	79	6.6	118	25.0	21.9	
Aug													
12	0900	50	11	.304	.245	755	7.6	84	6.6	137	22.5	20.2	28

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WATER-QUALITY DATA WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 2 of 4

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L as SiO2 (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti- tuents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total non- filter- able, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
Nov													
07	8.22	1.82	2.64	21.2	12	19.2	E.08	7.3	36.3	E105	119	4	.48
Jan													
07													
Mar													
06	7.01	1.66	2.01	13.1	E6	17.0	E.07	6.2	24.6	E77	96	8	.56
26													
Jun													
12	5.43	1.35	2.10	8.21	6	13.8	E.07	6.0	11.9	E55	73	7	.67
25													
Aug													
12	8.09	1.82	3.07	11.7	10	17.5	E.09	6.8	17.0	E76	94	9	1.0

WATER-QUALITY DATA WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 4

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water fltrd, mg/L as N (00631)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Total nitro- gen, water, fltrd, mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L as P (00666)	Phos- phorus, water, unfitrd mg/L as P (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Boron, water, fltrd, µg/L (01020)
Nov													
07	.310	.26	.10	.74	.83	.062	.097	.256	1.3	<.04	1.3	4.8	27
Jan													
07													
Mar													
06	.345	.27	.16	.83	.99	.038	.070	.166	1.8	<.04	1.8	5.5	21
26													
Jun													
12	.391	.38	.25	1.1	1.3	.020	.025	.228	3.8	M	3.7	9.0	24
25													
Aug													
12	.688	.63	.12	1.6	1.8	.019	.046	.186	1.6	<.04	1.6	5.0	34

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Part 4 of 4
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Date	Copper, water, fltrd, µg/L (01040)	Copper, water, unfitrd recover -able, µg/L (01042)
Nov		
07		
Jan		
07	1.4	1.2
Mar		
06		
26	1.7	1.5
Jun		
12		
25	1.7	2.0
Aug		
12		